

U.S. Solutions for Building Resilient and Net-Zero Infrastructure

"Nations that work together to invest in the cleaner economy will reap rewards for their citizens. The United States is committed – we are committed to making those investments to grow our economy here at home while connecting with markets around the world. For example, we are launching a new Global Partnership for Climate-Smart Infrastructure. This will create good-paying jobs here in America by supporting development of new, clean infrastructure in our partner countries. These are the sort of partnerships that are going to be good for all of us."

President Joseph R. Biden Jr. April 23, 2021

In April 2021, President Joe Biden announced the launch of the U.S. Trade and Development Agency's (USTDA) **Global Partnership for Climate-Smart Infrastructure** to connect U.S. industry to major clean energy and transportation infrastructure projects in emerging markets. One year after its launch, USTDA has already funded more than \$30 million in activities that will help our partners achieve their energy and transportation sector climate goals. This includes more than two dozen project preparation and partnership-building activities that are designed to unlock more than \$50 billion in climate finance and support more than \$12 billion in U.S. exports.

The Global Partnership for Climate-Smart Infrastructure (Global Climate Partnership) leverages USTDA's project preparation expertise – including feasibility studies, technical assistance, and pilot projects – as well as partnership-building activities, such as reverse trade missions, to support the use of U.S. technologies and services in overseas climate-smart infrastructure projects.

USTDA partners with an array of private and public sector partners through the Global Climate Partnership, including the American Clean Power Association, Intelligent Transportation Society of America, National Electrical Manufacturers Association, the Nuclear Energy Institute, Solar Energy Industries Association, the U.S. Chamber of Commerce, the United States Nuclear Industry Council, the U.S. Departments of Commerce, Energy and Transportation, and the Export-Import Bank of the United States.

USTDA's first-year commitments under the Global Climate Partnership include:



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Indo-Pacific

- <u>Bangladesh</u>: USTDA is funding technical assistance for Power Cell, a government department responsible for power sector reform, to develop a 10-year roadmap for incorporating smart grid elements into Bangladesh's electric grid.
- <u>India</u>: To help India meet its climate goals, USTDA funded a series of 10 virtual workshops focused on the decarbonization of the Indian energy sector through the deployment of new technologies, such as carbon capture, hydrogen, and renewables integration.
- India: USTDA is funding a feasibility study for Shivman Wind Energy Private
 Limited to help develop a state-of-the-art 300 megawatt (MW) renewable power
 facility utilizing solar, wind, and battery storage in Gujarat, India. The project's
 hybrid design will mitigate renewable energy variability to help stabilize the
 electricity grid, increase overall efficiency, and lower the cost of electricity.
- India: USTDA is helping BYPL, a private distribution company that serves Delhi, India, to improve its energy efficiency and reduce energy losses through technical assistance to develop a digital technology roadmap and platform for centralized energy data integration.
- Indo-Pacific Regional: In October 2021, USTDA co-hosted the 4th Indo-Pacific Business Forum, which covered themes related to energy innovation, climatesmart transport, the role of the private sector in climate action, green economic recovery, and climate and clean energy financing.
- <u>Pakistan</u>: USTDA is funding a feasibility study for Times Group, an engineering and construction company, for a renewable biofuels project that will improve environmental conditions in Karachi.
- <u>Philippines</u>: USTDA-funded technical assistance for the Philippines' Department of Transportation will help improve mobility and reduce traffic congestion in Metro Cebu through the development of a comprehensive plan to deploy intelligent transportation systems.



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- <u>Philippines</u>: USTDA is funding a feasibility study to advance the development of three utility-scale solar generation plants, totaling 50 MW, for Sun Keeper Initiative, a solar implementation program developed by several electric cooperatives in the Philippines.
- <u>Thailand</u>: USTDA is funding a feasibility study to support SCG International, one
 of the largest conglomerates in Thailand, in developing a roadmap for the
 transition of their industrial and commercial fleet to electric vehicles and
 installation of EV charging infrastructure over 600 sites.
- Tonga: USTDA is funding a feasibility study for the state-owned utility Tonga
 Power Limited (TPL) to support decarbonization of the power sector by
 improving efficiency and increasing renewable energy generation penetration in
 TPL's service area through the implementation of distributed energy resources.
- <u>Vietnam</u>: USTDA is funding an updated roadmap for Vietnam's National Power Transmission Corporation to modernize its information technology, communications, and power transmission systems, as well as enable smart grid technology investments.
- <u>Vietnam</u>: USTDA is providing technical assistance to help the Vietnam Air Traffic Management Corporation (VATM) strengthen aviation safety using advanced weather forecasting technologies that can help VATM become more resilient to the effects of climate change, such as an increase in severe weather events.

Latin America and the Caribbean

- <u>Brazil</u>: USTDA-funded technical assistance for Brazil's National Association of Passenger Rail Operators will help reduce costs and improve energy efficiency across their rail systems. The assistance will assess energy efficiency solutions such as energy storage and automation software that reduce emissions.
- <u>Brazil</u>: USTDA is funding technical assistance for the Brazilian Association of Electricity Distributors to support and enable further smart grid deployments in Brazil. The assistance will facilitate further investments and encourage the modernization of electricity distribution networks across Brazil.



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- <u>Dominican Republic</u>: USTDA-funded technical assistance is supporting the Dominican Republic's electricity regulator in its development of regulations to enable the deployment of battery energy storage systems.
- <u>Ecuador</u>: USTDA-funded technical assistance is supporting the development of an airport sustainability and energy efficiency plan for the new Guayaquil International Airport, with the goal of adopting energy-efficient technologies to reduce energy and water use and reduce greenhouse gas emissions.
- <u>Ecuador</u>: USTDA is funding technical assistance to enable Quito's public transit management company to modernize its bus fleet with electric buses and implement related intelligent transportation system technologies.
- <u>El Salvador</u>: USTDA is funding a feasibility study that will facilitate the installation of LED streetlights along more than 500 kilometers of highway.
- <u>Latin America Regional</u>: USTDA funded a four-part virtual reverse trade mission series focused on U.S. technologies and best practices to support priority water and wastewater infrastructure development projects across Latin America.
- <u>Mexico</u>: USTDA is funding a feasibility study to help Mexican solar company ENERMUN S.A. de C.V. develop a 100 MW solar power plant in Michoacan.
- St. Lucia: USTDA's first-ever technical assistance grant to St. Lucia will help the National Utilities Regulatory deploy six resilient microgrids that will use solar photovoltaic power generation and battery storage.

Middle East, North Africa, Europe & Eurasia

- Algeria: USTDA is funding technical assistance to help the Algerian Electric
 Transmission System Operator (GRTE) develop a distributed control system
 upgrade plan. The assistance will enable GRTE to better manage grid
 intermittency stemming from the transition to renewable energy sources and
 enhance control over distributed generation.
- <u>Poland</u>: USTDA is advancing Poland's most ambitious and consequential power sector investment in a generation through grant funding for a front-end



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engineering and design study to develop the country's first nuclear power plant. The study will facilitate Poland's transition away from coal-fired power and strengthen its efforts to ensure long-term clean energy security.

Sub-Saharan Africa

- Benin: USTDA is furthering energy access and the deployment of clean energy resources through funding for a pilot of a U.S.-made digitalized system for solar minigrid management.
- <u>Nigeria</u>: A USTDA-funded grant to Nigeria's Sosai Renewable Energies Company is advancing the development of approximately 100 solar minigrids and associated low voltage distribution networks in central and northern Nigeria.
- <u>Nigeria</u>: USTDA is further developing Nigeria's minigrid sector through a grant to EM-ONE Energy Solutions that will facilitate the deployment of up to 150 solar hybrid minigrid systems for healthcare sites and their neighboring communities.
- <u>Nigeria</u>: USTDA is providing grant funding to Nigeria's Daybreak Power Solutions
 Limited for a feasibility study to help optimize clean energy supply to commercial
 and industrial entities in the country.
- <u>Sierra Leone</u>: USTDA is funding a feasibility study on behalf of the Ministry of Energy to evaluate the viability of a proposed 192 MW hybrid power generation plant near the village of Nitti. The study is assessing how best to maximize the use of solar photovoltaic energy and provide reliable power generation.
- West Africa Regional: A USTDA-funded feasibility study is evaluating the viability of a 400-mile 225 kV transmission line, including associated substation and distribution equipment, from Côte d'Ivoire to Liberia, in support of the West African Power Pool's efforts to expand electricity access across the region.